
APPENDIX E

INTEGRATION OF SPECIAL OPERATIONS, MECHANIZED, AND LIGHT FORCES

Employing light, ranger, airborne, air assault, special operations, and mechanized infantry forces with SBCT units is a combat multiplier. These operations take advantage of the light unit's ability to operate in restricted and severely restricted terrain (such as urban areas, forests, and mountains) while augmenting the mobility and firepower inherent in SBCTs or mechanized units. To ensure mechanized and light assets are integrated and synchronized within the SBCT forces, they should be mutually supporting based on the SBCT commander's concept of employment. SOF provides the commander with force multipliers, especially in information operations, effects and intelligence. This appendix addresses conditions SBCT commanders must consider when planning and executing tactical operations, specifically when provided light infantry, mechanized infantry, or SOF.

Section I. ORGANIZATION, CAPABILITIES, AND LIMITATIONS

Across the spectrum of operations, there is an overlap in which SBCT, mechanized, and light forces can operate. The use of a mixed force in this overlap takes advantage of the strengths of assigned forces and offsets any respective weaknesses. Mechanized/light operations occur when an SBCT or mechanized force has light forces attached. Light/mechanized operations occur when an SBCT or mechanized/armored force is under the OPCON of a light infantry force in order for the heavier force to be logistically supported. The integration of SBCT, mechanized, and light forces can take advantage of the enemy force's structure to attack its weaknesses and seize the initiative.

NOTE: For the purpose of brevity, this appendix will use the term *mechanized* to indicate BFV- and tank-equipped units. *Light* forces include airborne and air assault infantry units, and SOF include Ranger units.)

E-1. MECHANIZED FORCES AND LIGHT INFANTRY OPERATIONS

The potential to use mechanized and or light forces together as part of an SBCT in military operations is unlimited and will capitalize on each other's strengths and offset weaknesses. The interjection of light forces in a mechanized theater allows the SBCT a flexible response to increasing tensions and a rapid response in the face of an integrated attack.

a. **Factors of METT-TC.** Mechanized or light forces are attached or OPCON to the SBCT. The decision to receive light or mechanized forces is based on the higher staff's (typically division or ARFOR level) task organization during course of action development or upon initiation of an SBCT commander's request for light infantry or mechanized force augmentation. In all cases, the factors of METT-TC drive the decision to use mechanized or light forces with the SBCT.

b. **Advantages and Challenges.** One advantage of mixing mechanized, SBCT, and light forces is greater tactical flexibility for the SBCT maneuver commander. In the

offense, the light infantry unit can infiltrate by ground or air to seize and hold restricted and severely restricted terrain, allowing the SBCT units to conduct mounted movement through these areas. Additionally, light units can air-assault into the enemy's rear, disrupting his defenses to create an exploitable weakness. Light units can also execute tasks such as attacking in restricted terrain to defeat enemy infantry in prepared positions. In the defense, the light infantry unit can defend in restricted and severely restricted terrain and allow the SBCT force to mass its combat power along the enemy's primary mounted avenue of approach. Along with such flexibility, the integrated force also has the advantage of the mobility and firepower inherent in mechanized units. The challenge of when to conduct mechanized and light operations is to understand the capabilities and limitations of each type of mechanized/armored and light force structure. To ensure effective integration of mechanized and light assets, all forces must be mutually supporting based on the SBCT commander's concept of employment.

E-2. MECHANIZED FORCES, MISSIONS, CAPABILITIES, AND LIMITATIONS

An SBCT operating with mechanized forces should consider the following missions, capabilities, and limitations of mechanized forces.

a. **Missions.** The missions given to mechanized forces are best suited for operations in unrestricted terrain.

b. **Capabilities.** The following are capabilities of mechanized forces:

- Conduct sustained combat operations in all environments.
- Accomplish rapid movement and deep penetrations.
- Exploit success and pursue a defeated enemy as part of a larger formation.
- Conduct security operations (advance, flank, and rear guard) for a larger force.
- Conduct defensive operations or delay in sector over large areas.
- Conduct offensive operations.
- Conduct operations with light and special operations forces.
- Conduct stability and support operations.
- Deploy personnel task-organized to an AO onto pre-positioned equipment.

c. **Limitations.** The following are limitations of mechanized forces:

- Mechanized forces are mainly dependent on radio communications. This makes mechanized forces vulnerable to EW reconnaissance. In the future, as the mechanized forces field C2 INFOSYS, this limitation may be reduced.
- Mechanized forces have restricted mobility in jungles, dense forests, steep and rugged terrain, built-up areas, and water obstacles.
- They have a high consumption rate of supply items, especially Classes III, V, and IX.
- They are vulnerable to antiarmor weapons and mines.
- Tank elements have difficulty defending positions against enemy infantry.
- Mechanized forces are not able to conduct long duration or continuous dismounted infantry operations.
- Mechanized forces require a secure ground line of communication.

E-3. LIGHT FORCES MISSIONS, CAPABILITIES, AND LIMITATIONS

The SBCT and its SBCT infantry forces may support any of three other types of light infantry units: light, airborne, and air assault. These infantry organizations vary in capabilities and limitations and in their impact on the SBCT. For example, differences in the organization of the infantry battalion headquarters and in its antiarmor capability may affect the SBCT mission. The SBCT commander and staff must understand the organization of the infantry forces in order that the SBCT may support them in either an attached or OPCON status.

a. **Missions.** The missions given to a light infantry unit in mechanized/light operations must consider the enemy's armored superiority in mobility and firepower. The light infantry must offset its vulnerabilities with dispersion, cover and concealment, and use of close and hindering terrain to slow the enemy. Table E-1 shows possible light infantry tasks.

MECHANIZED TASK FORCE MISSIONS	LIGHT INFANTRY COMPANY TASK
Movement to Contact	Clear and secure restricted areas; follow and support.
Attack	Air assault to fix or destroy enemy targets; infiltrate or air assault to seize objectives; breach obstacles; create a penetration.
Exploitation	Secure LOC; air assault to seize terrain or attack enemy forces.
Pursuit	Clear bypassed forces; air assault to block enemy escape.
Follow and Support	Secure key terrain and LOC; provide rear security.
Defense	Block dismounted avenues; perform security tasks; occupy strongpoint; ambush; provide rear area security; conduct urban operations.
Linkup	Serve as follow-up echelon.
Demonstration	Conduct display operations.
Retrograde Operations	Provide rear security, clear routes, occupy positions in depth; perform reconnaissance or deception; conduct stay-behind operations.

Table E-1. Example of possible light infantry tasks.

b. **Capabilities.** Light forces have the capabilities to perform the following actions:

- Seize, occupy, and hold terrain.
- Move on foot or by aircraft, truck, or amphibious vehicle.
- Move in all types of terrain.
- Conduct operations with tank and mechanized infantry forces.
- Conduct covert breaches.
- Conduct air assault operations.

- Take part in counterinsurgency operations within a larger unit.
- Rapidly accept and integrate augmenting forces.
- c. **Limitations.** Light forces have the following limitations:
 - They must depend on nonorganic transportation for rapid movement over long distances.
 - Without protective clothing, they are vulnerable to the effects of prolonged NBC exposure.
 - They require external support when they must operate for an extended period.
 - Unless dug in with overhead cover, they are extremely vulnerable to indirect fires.
 - Unless dug in, they are vulnerable in open terrain to long-range direct fires.

E-4. LIGHT INFANTRY BATTALION

The light infantry battalion is the most austere infantry battalion and the one whose organization is most different from that of an air assault, airborne, or mechanized battalion. There are only three rifle companies and a headquarters company in the light infantry battalion. It has four TOWs and 18 Dragons or Javelins. Organic fire support is provided by an 81-mm mortar platoon assigned to the headquarters company and two 60-mm mortars in each infantry company. Differences between this battalion and the air assault and airborne battalions are greatest in the organization of support and logistics elements. It has no trucks larger than its 27 cargo HMMWVs. The battalion has no mess team; Class I is prepared at brigade level. There is only one mechanic in the entire battalion; repairs are conducted at the brigade level. The battalion has only 18 long-range radios.

E-5. AIR ASSAULT AND AIRBORNE BATTALIONS

Once inserted, the air assault and airborne battalions perform much like the light infantry battalion, using walking as a primary means of transportation. Each battalion has ten 2-1/2-ton trucks and 36 cargo HMMWVs and can conduct tactical and nontactical movement by truck. Each has a mess section and a 16-man maintenance platoon. Air assault and airborne battalions have 30 long-range radios, 20 TOWs, and 18 Dragons or Javelins. An 81-mm mortar platoon assigned to the headquarters company provides organic fire support.

E-6. LIGHT INFANTRY COMPANY

The light infantry company has three platoons and a headquarters section, a total of 130 soldiers. The company headquarters contains both the antiarmor section, consisting of six Dragons or Javelins, and the mortar section, which has two 60-mm mortars. The rifle platoons, with 34 soldiers each, are organized into three squads and a headquarters section, which controls the platoon's machine guns. Each rifle squad consists of two fire teams.

E-7. AIRBORNE AND AIR ASSAULT COMPANIES

Airborne and air assault companies are capable of more independent action than their light infantry counterpart. Each of the three rifle platoons has a weapons squad as well as

three rifle squads. The weapons squads have both machine-gun crews and antiarmor missile crews. The company headquarters retains control of the 60-mm mortar section.

E-8. SPECIAL OPERATIONS FORCES MISSIONS, CAPABILITIES, AND LIMITATIONS.

Special Forces are employed in many roles spanning the full spectrum of conflict.

a. **Missions.** The primary missions of the SOF are special reconnaissance, direct action, foreign internal defense, unconventional warfare, combating terrorism, and information operations.

a. **Capabilities.** Special forces have the following capabilities:

- Infiltrate and exfiltrate specified operational areas by air, land, or sea.
- Conduct operations in remote areas and non-permissive environments for extended time with little external direction and support.
- Develop, organize, equip, train, advise, and direct indigenous military and paramilitary units and personnel.
- Train, advise, and assist US and allied forces.
- Conduct reconnaissance, surveillance, and target acquisition.
- Conduct direct-action operations that include raids, ambushes, sniping, emplacing of mines and other munitions, or providing terminal guidance for precision-guided missions.
- Conduct rescue and recovery operations.

b. **Limitations.** Special Forces are limited by the following:

- They depend on the resources of the theater army to support and sustain operations.
- They cannot conduct conventional combined armed operations on a unilateral basis. Their abilities are limited to advising or directing indigenous military forces conducting this type of operation.
- They do not have organic combined arms capability. They habitually require the support or attachment of other combat, CS, and CSS assets.
- They cannot provide security for operational bases without severely degrading operational and support capabilities.

E-9. THE UNITED STATES ARMY SPECIAL FORCES OPERATIONS COMMAND (USASOC)

USASOC has four subordinate special operational forces elements that may operate in the AOR of the SBCT.

a. **Ranger Regiment.** The rangers are a special operations infantry organization. Their task organization and command and control structure are configured to support the unique demands placed on them by the specialized nature of the missions they are expected to perform. They have personnel capable of serving in the role of liaisons to the brigade headquarters in the event operations or mission requirements would dictate this, but an operation requiring direct employment of both Ranger and SBCT forces in direct support of each other would be unusual. Ranger operations generally set conditions for follow-on conventional forces or are independent of conventional forces, focusing at objectives above the tactical level of warfare.

b. **Civil Affairs.** Civil affairs units establish, maintain, influence, or exploit relations between military forces and civil authorities, both government and non-government, and the civil populace in a friendly, neutral, or hostile area of operations in order to facilitate military operations and consolidate operational objectives. Civil affairs units are designed for employment independently, attached, OPCON, or tactical control (TACON) to other forces. At the SBCT, the most common element from a CA organization would be the civil affairs team (CAT). The CAT is structured to meet the immediate needs of the host nation populace by executing civil military operations in support of the overall plan. A civil affairs assessment team (CAAT) can also be sent down from the joint special operations task force (JSOTF) or the ARFOR command element to make a determination of the needs within the SBCT AOR prior to, or in conjunction with, a CAT. The SBCT information officer of the information operations element serves as the planner and advisor to the commander on how best to employ these assets. Civil affairs achieves a nonlethal effect and as such would be employed by the fires and effects coordination cell.

c. **Psychological Operations.** The purpose of psychological operations is to induce or reinforce foreign attitudes and behavior favorable to the originator's objectives. A tactical PSYOP team (TPT) can operate independently, attached, OPCON, or TACON to the SBCT. A TPT generally focuses on the dissemination of PSYOP material that already exists. Early in a deployment, the SBCT may also see a tactical PSYOP development team (TPDT) working in their AOR or attached from the JSOTF or ARFOR headquarters. A TPDT aids in the development of themes for information campaigns and determines specific targeting for PSYOP efforts. PSYOP is also a non-lethal effect and a function of information operations. Therefore, the SBCT information officer of the information operations element serves as the planner and advisor to the commander for employment of PSYOP elements under the control of the SBCT as part of the FECC.

d. **Army Special Forces.** Army Special Forces are employed in many roles spanning the full spectrum of conflict. The primary missions of the Army Special Forces are special reconnaissance, direct action, foreign internal defense, unconventional warfare, combating terrorism, and information operations. Special Forces units bring with them unique capabilities that include language ability and cultural training. Special Forces are capable of conducting operations that employ their own capabilities unilaterally, as well as joint, combined, coalition, and indigenous force operations in support of the overall theater engagement strategy. Special Forces operate on a tactical level to achieve strategic results. Their operations are inherently joint and frequently controlled by higher echelons, often with minimal involvement of intermediate HQ.

Section II. PLANNING CONSIDERATIONS

SBCT employment of mechanized, SBCT, and light forces requires thorough integration of the operating systems of all these types of units. This section focuses on planning considerations for each of the seven operating systems.

E-10. COMMAND AND CONTROL

The SBCT headquarters designates command relationships between SBCT, light infantry, tank, or mechanized infantry forces. The command relationship between a light unit and a mechanized unit can be either attached or OPCON. A light unit attached to a mechanized unit can normally be adequately supported. Attachment of a mechanized unit to a light

unit is unusual, as the mechanized unit requires considerable CS and CSS support from the mechanized unit's parent organization or from higher-level support assets.

a. **Communications.** Light units normally have considerably less digital and long-range communications capability than their SBCT or mechanized force counterparts. A gaining SBCT or mechanized unit must therefore thoroughly analyze the communications requirements of an attached light unit.

b. **Liaison Officers.** Units conducting light/mechanized or mechanized/light operations normally exchange LNOs who assist in joint operational planning, coordinate the development of orders and overlays, and serve as advisors to the counterpart units. In addition, leaders from the attached unit may be required to perform special functions in the light/mechanized or mechanized/light configuration.

E-11. INTELLIGENCE

Detailed intelligence is critical in integrating light infantry with SBCT, tank, and mechanized infantry forces. Light forces orient on concentrations of enemy units, including counterattack forces and artillery and air defense assets; they also focus on the enemy's infantry avenues of approach and LZs and PZs.

E-12. MANEUVER

The SBCT, light infantry, or the mechanized infantry force fixes the enemy, allowing the other forces to maneuver. Whether it conducts the fixing operation or maneuver, the light force requires the advantage of restricted terrain. The SBCT commander analyzes the maneuver considerations which apply in the use of light/mechanized or mechanized/light employment:

a. **Operational Tempo.** The differences between the operational tempo of light infantry and that of the SBCT, tanks, and mechanized infantry is always a key consideration, as are rehearsal schedules. An early rehearsal may be required, both to allow SBCT, light, and mechanized forces to take part jointly and to resolve the operational differences effectively. Ideally, these considerations are resolved during the war game process.

b. **Employment.** The light force is best suited to restricted and severely restricted terrain, where it can impede the enemy's mobility and nullify his ability to use long-range weapons and observation assets.

c. **Movement.** To help prevent detection, SBCT leaders should plan the movement of light infantry to coincide with limited visibility conditions such as darkness, severe weather, smoke, or fog.

d. **Fires.** Direct and indirect fires should be mutually supporting during integrated operations. The mechanized force can use its long-range direct fires to provide suppression, allowing infantry units to maneuver. Conversely, light infantry forces can provide overwatch or support by fire, allowing Strykers, tanks, and Bradley fighting vehicles (BFVs) to maneuver in restricted terrain.

e. **Infiltration.** SBCT and mechanized units can assist infiltration by augmenting security at the LD. They can use their thermal capability to scan the area for enemy forces and can provide direct fire support as necessary.

E-13. FIRE SUPPORT

The SBCT, mechanized infantry, or armored force must recognize that dismounted infantry operations utilize their ability to maneuver through restricted and severely restricted terrain undetected, which might not allow for preparatory and other preliminary fires. Fire support available to each force must be integrated into the fire support plan. Planners must know the organizations, capabilities, and limitations of all forces involved, particularly their digital and nondigital capabilities. During planning and preparation, a liaison team helps synchronize fire support. Restricted fire control measures must be jointly developed and understood by everyone.

E-14. AIR DEFENSE

Air defense assets may be deployed to fight and provide protection within the scope and design of any organization. Because infantry forces frequently maneuver in restricted terrain, based on the battalions task organization, Avenger and Bradley Stinger fighting vehicle (BSFV) coverage associated with a mechanized force may not be feasible. In such operations, man-portable Stingers should be allocated to support the infantry.

E-15. MOBILITY AND SURVIVABILITY

A common obstacle plan for the SBCT must be developed for light/mechanized or mechanized/light operations. Light forces may be used to reduce obstacles and clear choke points for the tank, SBCT, and mechanized infantry forces. In breaching operations, light forces must ensure the breach is large enough for the widest vehicle in the operation. Survivability remains the priority for light forces, which must prepare to take advantage of the engineer assets available to the SBCT, mechanized infantry, and armored forces.

E-16. NUCLEAR, BIOLOGICAL, CHEMICAL

The light force lacks decontamination equipment and is more limited in an NBC environment than the SBCT, mechanized infantry, and armored force. The requirement for soldiers to carry protective clothing in addition to their standard loads affects the mobility of the light force. When higher headquarters cannot provide transportation assets, planners should arrange for mechanized infantry and armored unit vehicles to help transport light force NBC equipment. A mechanized infantry and tank battalion task force also has expedient devices and water-hauling capabilities it can use to offset light force shortfalls. Transporting these items with SBCT, mechanized, or armored assets reduces the load of light infantry units. Commanders must consider METT-TC factors and must plan linkup points to ensure the light unit obtains these critical items as it needs them.

E-17. COMBAT SERVICE SUPPORT

Light units are not organized, equipped, or trained to meet the support requirements of an SBCT or mechanized force. The light force relies on considerable assistance from the SBCT or mechanized force's organic elements and from division- or corps-level support assets. SBCT or mechanized units, however, should be able to provide support to a light infantry unit. For a more detailed discussion of CSS considerations, refer to Section V of this appendix.

E-18. SPECIAL OPERATIONS FORCES PLANING CONSIDERATIONS

The following are planning considerations for requesting direct support of SOF and linkup procedures.

a. **Request for SOF Support.** Commanders can request direct support of SOF from the unified command's special operations command (SOCOM). The SOCOM forms a joint special operations task force, as required.

b. **Special Forces Liaison Element (SFLE).** During the planning phase, an SOF liaison officer is assigned to the SBCT along with all communications assets necessary for immediate communications with SOF assets at JSOF headquarters and at the objective area. The SOF liaison officer and assets make up the SFLE. The SOI and signal plan must standardize not only frequencies and call signs but address visual signals as well as daylight and night operations.

- ARSOF provides a special operations command and control element (SOCCE) to its supporting operational HQ. The SOCCE links with the SBCT through the SOF liaison officer in the SFLE.
- The SFLE coordinates with the SBCT S2/S3 sections and both elements provide the current situation, commander's intent, and future operations of their respective forces (within OPSEC limits).
- The SOCCE provides SOF locations through personal coordination through the SFLE, overlays, and other friendly order of battle data to the FECC and SBCT S-3 section.
- The SFLE requests appropriate restricted fire support coordination measures and provides time windows when these measures are to be effective. The SOCCE must also ensure that FECC dissemination of these measures does not result in OPSEC violations.

Section III. OPERATIONS

SBCT employment of mechanized and light forces requires a thorough understanding of tactical employment of light and mechanized forces during the conduct of the offense or defense. This section focuses on tactical employment of combined mechanized and light forces with the SBCT during combat operations.

E-19. OFFENSIVE OPERATIONS

The fundamentals, principles, and concepts discussed in Chapter 4 (offensive operations) emphasize the fact that while combining forces in the offense can work in many different ways, the following are some of the most common examples.

a. **Mechanized Force Support, Light Force Assault.** Tanks, Strykers, and BFVs support by fire while the infantry assaults the objective. The vehicles fire from hull-defilade positions until the infantry masks their fires. This is the most effective method for Strykers or BFVs and may be used with tanks when antitank weapons or obstacles prohibit them from moving to the objective.

(1) This method may incorporate a feint to deceive the enemy as to the location of the main attack. If so, the mechanized force supporting attack is timed to divert the enemy's attention from the light force's assault. The fires of the SBCT or mechanized force may also cover the sound of the infantry's approach or breach. Close coordination is vital for effective fire control.

(2) This method may vary when either the terrain or disposition of the enemy limits the ability of SBCT or mechanized forces to support the infantry's attack. In this case, the SBCT or mechanized force may be tasked to suppress, fix adjacent enemy positions, or to accomplish other tasks to isolate the objective area.

b. **Simultaneous Assault.** With this method SBCT, light, and mechanized forces advance together, and infantry and vehicles move at the same speed. The vehicles may advance rapidly for short distances, stop and provide overwatch, then move forward again when the infantry comes abreast. Tanks are best suited to assault under fire. SBCT or mechanized infantry vehicles may also be used in this manner but only when the threat of antitank fires is small. Additionally, the armored protection provided by a Stryker vehicle is considerably less than that of a Bradley fighting vehicle. If an antitank threat exists, infantry usually leads while the vehicles follow to provide fire support.

(1) This method may be used when the enemy situation is vague, when the objective is large and consists of both open and restricted terrain, or when visibility, fields of fire, and the movements of the mechanized force are restricted. These conditions exist during periods of restricted visibility and in restricted terrain, such as in urban areas and wooded areas. The vehicles provide immediate close direct fires, and the infantry protects the vehicles from individual antitank measures.

(2) This method sometimes requires infantry to follow a safe distance behind the tanks, Strykers, or BFVs for protection from frontal fires. This is true when the main enemy threat is small-arms fire. From behind the Strykers, tanks, or BFVs, the infantry can protect the flanks and rear of the vehicles from handheld antitank weapons.

(3) This method may require light, SBCT, and mechanized forces to advance together in operations that require long, fast moves. Infantrymen ride on the armored vehicles or trucks until they make contact with the enemy. Although this is a quick way to move, it exposes infantry to enemy fire, particularly airburst munitions, and may interfere with the operation of Strykers, BFVs, and tanks.

c. **Assault from Different Directions.** Mechanized, SBCT, and light forces converge on the objective from different directions. Strykers, BFVs, tanks, and light infantry advance by different routes and assault the objective at the same time. For this synchronization to succeed, the light infantry elements maneuver and close on their assault position, ideally under cover of darkness or poor weather. The synchronization of the assault provides surprise, increases fire effects, and maximizes mechanized shock action. Planning, disseminating, and rehearsing the coordination of direct and indirect fire measures are critical in this type of operation.

(1) This method is effective when using Strykers, tanks, and BFVs and when two conditions exist. First, terrain must be at least partly unrestricted and free from mines and other armored vehicle obstacles. Second, supporting fires and smoke must effectively neutralize enemy antitank weapons during the brief period required for the Strykers, tanks, and BFVs to move from their assault positions to the near edge of the objective.

(2) This method requires coordination of light and SBCT infantry as well as mechanized forces to provide effective fire control on the objective. When conditions prohibit the Strykers, tanks, and BFVs from advancing rapidly, infantry should accompany them to provide protection.

E-20. EXPLOITATION

Exploitation follows success in battle. The SBCT or mechanized force is usually the most capable exploitation force. It takes full advantage of the enemy's disorganization by driving into his rear to destroy and defeat him. An SBCT or mechanized force operating as a unit (Stryker, BFV, and tank-equipped units) may exploit the local defeat of an enemy force or the capture of an enemy position. The purpose of this type of operation is to prevent reconstitution of enemy defenses, to prevent enemy withdrawal, and to secure deep objectives. A common combination is an SBCT or mechanized task force reinforced by a light infantry unit, engineers, and other supporting units. The infantry may be transported in armored vehicles or trucks or may ride on the tanks. Riding on tanks reduces road space, decreases supply problems, and keeps the members of the unit together but exposes the riding infantry to enemy artillery fire. Infantry leaders ride with the corresponding tank, BFV, or Stryker unit commanders. The SBCT commander must weigh the likelihood of enemy contact against the need for speed.

E-21. DEFENSIVE OPERATIONS

The combination of SBCT, light infantry, and mechanized forces is well suited to conduct defensive operations. The mechanized force provides a concentration of antiarmor weapons and the capability to counterattack by fire or maneuver rapidly. The light force can occupy strongpoints and conduct spoiling attacks and stay-behind operations. The fundamentals, principles, and concepts discussed in Chapter 5 apply to combined light and mechanized force defensive operations.

a. **Light Force in Depth, SBCT or Mechanized Force Forward.** The SBCT, mechanized infantry, and armored unit cover forward of a light unit's defense, masking the location of the light unit. While passing through the light unit's positions, SBCT or mechanized infantry and armored units provide most of their own overwatch protection. Careful planning is required for battle handover to the light unit. Light unit direct fire overwatch weapons that are able to support from inside the battle handover line are scarce. To solve this problem, the SBCT or mechanized infantry and armored force can provide some of their antiarmor assets to the light infantry. These assets usually are provided at battalion level and below.

b. **Light Force Forward, SBCT or Mechanized Force in Depth.** The SBCT or mechanized force assumes positions in depth behind the light unit's defense. The light unit's forward deployment shapes the battlefield for decisive action by the mechanized forces. The light unit leaves an avenue of approach into the mechanized force's engagement area. At the same time, the light unit prevents the enemy from using restricted terrain. Once the light infantry unit conducts battle handover, the SBCT or mechanized force counterattacks, destroying the enemy or blocking him until additional units can be repositioned to destroy him. To support the counterattack, the light unit identifies the location of the enemy's main effort, slows his advance, and destroys his command, control, and CS elements. The light unit can guide the counterattacking force through restricted terrain to surprise the enemy on his flank.

c. **Light Force Terrain-Oriented, SBCT or Mechanized Force Enemy-Oriented.** Terrain-oriented refers to area defense; enemy-oriented refers to mobile defense. With this method, the entire force defends along the FEBA. The light force, whether used as a flanking or covering force or positioned in depth, places its elements to use restricted and

severely restricted terrain effectively. The SBCT or mechanized force keeps its freedom of maneuver. To protect the light unit, contact points between light, SBCT, and mechanized forces should be in restricted terrain. A light unit may defend to hold terrain while the tanks and BFVs maneuver to destroy the enemy from the flanks or rear.

d. **Strongpoint.** The light unit, with significant additional assets, may occupy a strongpoint. The strongpoint forces the enemy into the SBCT or mechanized force's EA.

e. **Stay-Behind Operations.** The light unit occupies hide positions well forward of the FEBA. As the enemy passes, the light force attacks the enemy's command, control, CS, or CSS elements. The SBCT or mechanized force defends against enemy maneuver forces. The SBCT battalion must have plans to ensure the survivability of the light forces once the enemy forces separate the light infantry from the SBCT or mechanized forces.

E-22. RETROGRADE OPERATIONS

Retrograde operations include delays and withdrawals which gain time and avoid decisive action. Mechanized and augmented SBCT forces are employed against the enemy forces and avenues of approach that most threaten the operation. To move to subsequent positions, light forces need additional transportation assets to include helicopters, if available. Basic movement techniques include maneuver and a reverse bounding overwatch. SBCT or mechanized forces with small light force units mounted, along with infantry reconnaissance platoons and antitank elements, move to subsequent delay positions under the cover of mutually supporting forces.

E-23. SPECIAL FORCES OPERATIONS

Under the control of SOF headquarters, special forces, rangers, and special operations aviation can conduct combat operations against high-value targets.

a. **SOF and SBCT Operations.** SOF may operate with the SBCT or within the SBCT AO. Physical contact between the SBCT and SOF is typically short term. It usually ends with a passing of responsibility, the passage of friendly lines, or the extraction of SOF. The focus, therefore, should be on synchronization (not physical integration) of SBCT and SOF on the ground. Synchronization involves the simultaneous or sequenced execution of separate actions in time and space to achieve a synergistic effect.

b. **Linkup.** SOF and the SBCT conduct operations in war or in stability and or support operations that may require a linkup. Linkup operations are often one of the most difficult operations to conduct because of the differences in the SOPs of the units conducting linkup. As linkup becomes imminent, coordination and control are intensified. The SBCT and the SOF element conducting linkup must adhere to emplaced control measures to ensure successful operations and to prevent fratricide. The two types of linkup operations are physical linkup operations and communications linkup operations.

(1) **Physical Linkup Operations.** Physical linkup operations occur when the SBCT unit(s) links up with and establishes physical contact with a deployed SOF element or a resistance element, if applicable (as in a UO scenario). During operations in a joint special operations area (JSOA) or region, a physical linkup occurs at a specified contact point. During stability operations or support operations, a physical linkup may occur in the rear area, JSOA, or AO. A physical linkup is the most difficult to plan, conduct, and

control effectively. It requires detailed, centralized coordination and planning at a planning conference between the SBCT forces, the SOCCE, and the deploying SOF element, if available. Physical linkups are conducted for--

- Any instance where the SBCT operation requires physical interaction with an SOF unit already deployed or deploying into the same AO for operations.
- Resupply and logistics.
- Intelligence.
- Exfiltration of the sick and wounded.
- Exfiltration of very important people and prisoners of war.
- Infiltration of U.S. and resistance replacements.
- Coordination and planning.
- Transferring guides and liaisons to the SBCT.

(2) ***Communications Linkup Operations.*** Communications linkup operations take place when operations are conducted between SBCT forces and a deployed SOF element and a physical linkup is not required or desirable. A communications linkup requires coordination between all linkup forces. It also requires compatible communications equipment and current SOI. The SOI must be exchanged at a planning conference. Whenever possible, all linkup forces must rehearse the SOI, complete their planning, and implement coordinating instructions not later than (NLT) 24 hours before the start of the linkup operations. Communications linkups may take place when the SBCT conducts--

- Offensive operations, and an SOF element already in the AO or the resistance force functions as a blocking or screening force.
- A raid, and an SOF element already deployed or the resistance force conducts security missions.
- Offensive operations, and an SOF element already deployed or the resistance force conducts deception operations.
- Offensive operations, and an SOF element already deployed or the resistance force conducts tactical reconnaissance and surveillance of the intended conventional force target.

Section IV. ADDITIONAL SBCT OPERATIONAL CONSIDERATIONS

The following additional considerations apply in light/mechanized or mechanized/light operations.

E-24. DISMOUNTED INFANTRY MOVEMENT RATES

Commanders of SBCT or mechanized forces must estimate accurately the speed with which dismounted elements can move. Numerous factors can affect the rate of march for light forces: tactical considerations, weather, terrain, march discipline, acclimatization, availability of water and rations, morale, individual soldier's self-confidence, and individual loads. Table E-2, page E-14, summarizes dismounted rates of march for normal terrain. The normal distance covered by a dismounted force in a 24-hour period is from 20 to 32 kilometers, marching from five to eight hours at a rate of 4 kmph. A march in excess of 32 kilometers in 24 hours is considered a forced march. Forced marches increase the number of hours marched, not the rate of march, and can be expected to impair the unit's fighting efficiency. Absolute maximum distances for dismounted

marches are 56 kilometers in 24 hours, 96 kilometers in 48 hours, or 128 kilometers in 72 hours.

	ROADS	CROSS-COUNTRY
Day	4.0 kph	2.4 kph
Night	3.2 kph	1.6 kph

Table E-2. Dismounted rates of march (normal terrain).

E-25. TANK MOUNTED INFANTRY

An additional maneuver consideration for a light/mechanized or mechanized/light operation is the decision of whether to move infantrymen on tanks. This mode of transportation can be difficult but is not impossible. It does, in fact, afford some significant advantages. The mounted infantry can provide additional security. When the unit conducts a halt or must execute a breach or other tactical tasks, infantry assets are readily available to provide support and security. The SBCT commander must weigh the potential dangers of carrying tank-mounted infantrymen against the advantages of mobility and the security they can provide. For an example, specific procedures, and safety considerations involved in mounting infantry on tanks, refer to FM 3-20.15.

E-26. SAFETY CONSIDERATIONS

Initially, most light infantrymen are not familiar with the hazards that may arise during operations with tanks, BFVs, and other armored vehicles. The most obvious of these include the dangers associated with main-gun fire and the inability of armored vehicle crews to see people and objects near their vehicles. Leaders of mechanized and light units alike must ensure that their troops understand the following points of operational safety.

a. **Discarding Sabot.** Tank sabot rounds and BFV antipersonnel rounds discard stabilizing petals when fired, creating a downrange hazard for infantry. The aluminum petals of the tank rounds are discarded in an area extending 70 meters to the left and right of the gun-target line, out to a range of 1 kilometer. The danger zone for BFV rounds extends 30 degrees to the left and right of the gun-target line, out to 200 meters from the vehicle. Infantrymen should not be in or near the direct line of fire for the tank main gun or BFV cannon unless they are under adequate overhead cover.

b. **Noise.** Tank main guns create noise in excess of 140 decibels. Repeated exposure to this level of noise can cause severe hearing loss and even deafness. In addition, dangerous noise levels may extend more than 600 meters from the tank. Single-layer hearing protection, such as earplugs, allows infantrymen to work within 25 meters of the side or rear of the tank without significant hazard.

c. **Ground Movement Hazards.** Crewmen on Strykers, tanks, and BFVs have very limited abilities to see anyone on the ground to the side or rear of the vehicle. As a result, vehicle crews and dismounted infantrymen share responsibility for avoiding the hazards this may create. Infantrymen must maintain a safe distance from armored vehicles at all times. In addition, when they work close to an armored vehicle, dismounted soldiers must ensure that the vehicle commander knows their location at all times.

NOTE: A related hazard is that the Stryker and M1-series tanks are deceptively quiet and may be difficult for infantrymen to hear as they approach. As noted,

vehicle crews and dismounted infantrymen share the responsibility for eliminating potential dangers in this situation.

d. **M1 Exhaust Plume Hazard.** M1-series tanks have an extremely hot exhaust plume that exits from the rear of the tank and angles downward. This exhaust is hot enough to burn skin and clothing.

e. **TOW Missile System.** The TOW missile system has a dangerous area extending 75 meters to the rear of the vehicle in a 90-degree "cone." The area is divided into a 50-meter danger zone and a 25-meter caution zone.

Section V. CSS OPERATIONS

CSS planning and execution are critical elements for integration of light, SBCT, and mechanized forces. Light battalions are not organized, equipped, or trained to meet the support requirements of a mechanized unit. CSS may be further complicated if the mechanized force is operating across a large geographical area to meet the demands of a decentralized mission. The following discussion covers SBCT CSS considerations that may affect light/mechanized and mechanized/light operations.

E-27. PLANNING AND INTEGRATION

Light/mechanized operations may require the mechanized unit to integrate into the SBCT or light infantry battalion organization early in the deployment phase. In turn, this may require CSS assets to move into the theater of operations very early as well, usually at the same time as the command and control elements. Specific support requirements, including needed quantities of supplies, depend on the mission and must be planned and coordinated as early as possible. In addition, because the light unit does not possess the required logistical redundancy to sustain the mechanized units, it is imperative that mission requirements, if beyond SBCT capabilities, be identified early in the planning process and requested from division- or corps-level CSS assets.

E-28. SUPPLY REQUIREMENTS

Operations with light units create many unique supply considerations for the mechanized force. The sheer bulk and volume of supplies required by the mechanized force merit special attention during the planning and preparation phases. The following paragraphs examine some of these supply-related considerations.

a. **Class I.** Class I requirements are determined based on the mechanized unit's personnel strength reports. This process may be complicated by unique mission requirements imposed on the organization, such as rapid changes in task organization or dispersion of subordinate elements over a wide area.

b. **Class II.** Many Class II items required by Stryker, tank, and BFV crews, such as specialized tools and clothing, may be difficult to obtain in a light organization. Although such items can be ordered through normal supply channels, the mechanized force may face significant delays in receiving them. To overcome this problem, the mechanized force should identify any potential shortages and arrange to obtain the needed supplies before leaving its parent organization.

c. **Class III.** The fuel and other POL products required by the mechanized force are extremely bulky; they present the greatest CSS challenges in planning and preparing for

light/mechanized operations. Transportation support must be planned carefully. For example, planners must consider the placement of fuel HEMTTs during all phases of the operation. They must also focus on general-use POL products, such as lubricants, that are not ordinarily used by the light unit. As noted previously, the mechanized force should stock its basic load of these items, as well as make necessary resupply arrangements, before attachment to the light unit.

d. **Class IV.** The mechanized force does not have any unique requirements for barrier or fortification materials. The main consideration is that any Class IV materials that the mechanized force commander wants may have to be loaded and carried prior to attachment.

e. **Class V.** Along with POL products, ammunition for the mechanized force presents the greatest transportation challenge in light/mechanized operations. Planning for Class V resupply should parallel that for Class III; key considerations include anticipated mission requirements and the availability of HEMMTs. Ammunition may be prestocked based on expected consumption rates.

f. **Class VI.** Light/mechanized operations create no unique requirements for personal demand items and sundries.

g. **Class VII.** Class VII consists of major end items, such as "float" tanks, Strykers, or BFVs. The handling of these items requires thorough planning to determine transportation requirements and positioning in the scheme of the operation.

h. **Class VIII.** The SBCT or mechanized force involved in light/mechanized operations may deploy with additional Class VIII to sustain projected METT-TC requirements.

i. **Class IX.** Repair parts for combat vehicles are essential to the sustainment of the SBCT or mechanized force. Prescribed load list (PLL) and ASL stockage levels must be carefully considered before light/mechanized operations begin. The SBCT or mechanized force may find it advantageous to prestock selected items to meet its anticipated needs.

E-29. OPERATIONAL CONSIDERATIONS

A mechanized or SBCT force can satisfy the CSS needs of a light infantry unit more easily than a light infantry force can satisfy the needs of a mechanized force.

a. **Mechanized Force with a Light Infantry Unit.** Except for mortar rounds, the mechanized infantry or tank unit can provide all munitions the light infantry unit requires. The mechanized force must plan to receive and move 120-mm, 81-mm, or 60-mm mortar munitions.

b. **Infantry Unit with Mechanized Force.** Adding an SBCT, mechanized infantry, and tank force to an infantry unit significantly increases the fuel, ammunition, and maintenance that must be delivered to the forward area support team or the forward support battalions. The infantry unit lacks the transportation required to support even a small SBCT or mechanized force, particularly the mechanized equipment transports (HETs), for armored vehicle evacuation. The mechanized force must constantly anticipate the mechanized unit's needs to allow the infantry S4 more time to react. Support packages may be required for the SBCT or mechanized element that is attached or under OPCON of the light force. The preferred method of command relationship in this case is OPCON, which permits the mechanized force to continue receiving support

from its CSS elements. The support package may need to include fuel, HEMTTs and operators, HETs with drivers, tracked ambulances, and maintenance support teams.